Harvard School of Public Health Healthy Public Housing Year of Grant: 2000

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Healthy Public Housing is a Boston-based, community-centered project designed to engage residents in a collaborative process to improve the health, quality of life, and building conditions of residents in public housing. Central to its goals are four main activities: (1) to train, employ and empower residents of Boston public housing in gathering information about their housing conditions, particularly those conditions that affect their health; (2) to plan together, implement, and evaluate cost-effective improvements in apartments and buildings, health promotion programs with residents, and training in selected "best practices" for maintenance staff; (3) to document resident health and empowerment as a result of building improvements and project participation; and (4) to disseminate the results locally, at the state level, and nationally with the intention of influencing policy on housing and health.

The Healthy Public Housing collaborative is comprised of public housing residents, the Boston Housing Authority (BHA) and the Committee for Boston Public Housing (a resident advocacy organization); Boston's three schools of public health at Boston University, Harvard University, and Tufts University; a pediatric asthma specialist at the Boston Medical Center; the South Boston Community Health Center; the Boston Public Health Commission; and specialists in energy efficiency and housing policy and finance.

The project is a culmination of almost three years of partnership-building in which members have worked together to address and change the factors that lead to poor health outcomes for residents in public housing. Findings from our three pilot surveys revealed that many environmental health problems residents reported are associated with the physical conditions of the building and apartments: including water leaks; moisture and mold; uncontrolled heating and surfaces that burn the skin; insufficient ventilation; lack of cleanliness and sanitation in common areas. Significantly, the results revealed both structural and personal factors that can contribute to tenant illness and injury and which can be addressed through a combination of building improvements, change in maintenance policy, and community health education programs.

The findings and lessons learned from this work have made a compelling case for a larger, more comprehensive resident-centered project. To this end we plan an multi-year program to train residents to survey 400 households in two typical Boston public housing developments with the goal of developing and evaluating health and housing interventions in 120 households with at least one person with asthma or other respiratory disease. Our proposed project adds instrument measures of chemical and biological contaminants and comfort parameters, resident surveys to determine health status and health care usage, and a broader scope of analysis. More importantly, our project focuses on the efficacy of interventions rather than simply understanding the baseline prevalence of housing conditions and health outcomes. We expect to implement multilevel interventions that might include capital improvements, changes in maintenance practices and pest management, resident education and training, supplemental air cleaning and ventilation, and health management. All of these interventions will be decided upon through team focus group discussions of the survey and monitoring results.

Our project design will allow us to test a range of physical and educational interventions across multiple populations and housing developments. We have selected two BHA developments that reflect two basic types of public housing developments: older structures not undergoing modernization, and older structures undergoing modernization and energy upgrades. This will allow us to understand whether large-scale, building-wide interventions produce desirable health outcomes, by tracking changes in environmental conditions and resident perceptions of health and comfort after installations of energy upgrades. It will also help us understand how the effectiveness of small-scale interventions can vary by setting. We will also track both asthmatic and non-asthmatic children and their families, to help understand the effectiveness of asthma management and other interventions on a variety of families. The 120 families will be divided into two groups of 60. One group will receive asthma-specific interventions while the other group will receive non-asthma, injury and safety educational interventions. In this way, all families are active participants in the project, with each group acting as the control for the other group. The project will directly involve 120 children and their families in tracking impacts of direct interventions, with the potential to assist and empower all residents of the selected developments through educational and health outreach interventions.

We will work with residents to quantify the impact of disease and injury as well as calculate the direct medical costs so as to influence public policy regarding the cost-effectiveness of building improvements. Our results will ultimately be used to

improve maintenance practice in public housing and to influence national policy on both capital improvements in public housing and health financing.

Healthy Public Housing is set to launch in spring 2001. This two-and-a-half year project has an estimated budget of \$2.13 million. The Healthy Homes Initiative Grant Program at U.S. Housing and Urban Development Department (HUD) has already given \$1.2 million over three years to the project, and the Boston Housing Authority is making significant contributions of staff time and program resources totalling \$362,000. This HUD-funded project is part of a larger, \$8.0 million, five-year initiative. The Collaborative is simultaneously working to raise the remaining projected funding needs from foundations and other federal agencies.

The project team is invested in this project because it has such potential improve the health and living conditions of low-income families by empowering residents through knowledge and action. Our project location is here in Boston, with the BHA and public housing residents, but our goal is to press outward, armed with knowledge and with those most affected, to advocate for changes in health and housing policies and practices at all levels.